CANCER FACTS

National Cancer Institute • National Institutes of Health

Complementary and Alternative Medicine in Cancer Treatment: Questions and Answers

1. What is complementary and alternative medicine?

Complementary and alternative medicine (CAM)—also referred to as *integrative* medicine—includes a broad range of healing philosophies, approaches, and therapies. A therapy is generally called *complementary* when it is used *in addition to* conventional treatments; it is often called *alternative* when it is used *instead of* conventional treatment. (Conventional treatments are those that are widely accepted and practiced by the mainstream medical community.) Depending on how they are used, some therapies can be considered either complementary or alternative.

Complementary and alternative therapies are used in an effort to prevent illness, reduce stress, prevent or reduce side effects and symptoms, or control or cure disease. Some commonly used methods of complementary or alternative therapy include mind/body control interventions such as visualization or relaxation; manual healing, including acupressure and massage; homeopathy; vitamins or herbal products; and acupuncture.

2. Are complementary and alternative therapies widely used?

Research indicates that the use of complementary and alternative therapies is increasing. A large-scale study published in the November 11, 1998, issue of the *Journal of the American Medical Association* found that CAM use among the general public increased from 34 percent in 1990 to 42 percent in 1997.

Several surveys of CAM use by cancer patients have been conducted with small numbers of patients. One study published in the February 2000 issue of the journal *Cancer* reported that 37 percent of 46 patients with prostate cancer used one or more CAM therapies as part of their cancer treatment. These therapies included herbal remedies, old-time remedies, vitamins, and special diets. A larger study of CAM use in patients with different types of cancer was published in the July 2000 issue of the *Journal of Clinical Oncology*. That study found that 83 percent of 453 cancer patients had used at

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3. How are complementary and alternative approaches evaluated?

It is important that the same scientific evaluation which is used to assess conventional approaches be used to evaluate complementary and alternative therapies. A number of medical centers are evaluating complementary and alternative therapies by developing clinical trials (research studies with people) to test them.

Conventional approaches to cancer treatment have generally been studied for safety and effectiveness through a rigorous scientific process, including clinical trials with large numbers of patients. Often, less is known about the safety and effectiveness of complementary and alternative methods. Some of these complementary and alternative therapies have not undergone rigorous evaluation. Others, once considered unorthodox, are finding a place in cancer treatment—not as cures, but as complementary therapies that may help patients feel better and recover faster. One example is acupuncture. According to a panel of experts at a National Institutes of Health (NIH) Consensus Conference in November 1997, acupuncture has been found to be effective in the management of chemotherapy-associated nausea and vomiting and in controlling pain associated with surgery. Some approaches, such as laetrile, have been studied and found ineffective or potentially harmful.

4. What is the Best Case Series Program?

The Best Case Series Program, which was started by the National Cancer Institute (NCI) in 1991, is another way that early data about complementary and alternative approaches are evaluated. The Best Case Series Program is overseen by the NCI's Office of Cancer Complementary and Alternative Medicine (OCCAM). Through the Best Case Series Program, health care professionals who offer CAM services submit their patients' medical records and related materials to OCCAM. The OCCAM conducts a critical review of the materials and presents the approaches that have the most therapeutic potential to the Cancer Advisory Panel for Complementary and Alternative Medicine (CAPCAM) for further review.

CAPCAM was jointly created in 1999 by the NCI and the NIH National Center for Complementary and Alternative Medicine (NCCAM). CAPCAM's membership is drawn from a broad range of experts from the conventional and CAM cancer research and practice communities. CAPCAM evaluates CAM cancer approaches that are submitted through the Best Case Series Program, and makes recommendations to NCCAM on whether and how these approaches should be followed up.

5. Is NCI sponsoring clinical trials in complementary and alternative medicine?

The NCI is currently sponsoring several clinical trials (research studies with patients) that study complementary and alternative treatments for cancer. Current trials include enzyme therapy with nutritional support for the treatment of inoperable pancreatic cancer, shark cartilage therapy for the treatment of non-small cell lung cancer, and studies of the effects of diet on prostate and breast cancers. Some of these trials compare alternative therapies with conventional treatments, while others study the effects of complementary approaches used in addition to conventional treatments. Patients who are interested in taking part in these or any clinical trials should talk with their doctor.

More information about clinical trials sponsored by the NCI can be obtained from NCCAM, OCCAM, and the NCI's Cancer Information Service (CIS) (see below).

6. What should patients do when considering complementary and alternative therapies?

Cancer patients considering complementary and alternative therapies should discuss this decision with their doctor or nurse, as they would any therapeutic approach, because some complementary and alternative therapies may interfere with their standard treatment or may be harmful when used with conventional treatment.

7. When considering complementary and alternative therapies, what questions should patients ask their health care provider?

- What benefits can be expected from this therapy?
- What are the risks associated with this therapy?
- Do the known benefits outweigh the risks?
- What side effects can be expected?
- Will the therapy interfere with conventional treatment?
- Is this therapy part of a clinical trial? If so, who is sponsoring the trial?
- Will the therapy be covered by health insurance?

8. How can patients and their health care providers learn more about complementary and alternative therapies?

Patients and their doctor or nurse can learn about complementary and alternative therapies from the following Government agencies:

The **NIH National Center for Complementary and Alternative Medicine** (NCCAM) facilitates research and evaluation of complementary and alternative practices, and provides information about a variety of approaches to health professionals and the public.

NCCAM Clearinghouse Post Office Box 7923

Gaithersburg, MD 20898–7923

Telephone: 1–888–644–6226 (toll free)

301–519–3153 (for International callers)

TTY (for deaf and hard of hearing callers): 1–866–464–3615

Fax: 1–866–464–3616 E-mail: info@nccam.nih.gov Web site: http://nccam.nih.gov

NCCAM and the NIH National Library of Medicine (NLM) jointly developed CAM on PubMed, a free and easy-to-use search tool for finding CAM-related journal citations. As a subset of the NLM's PubMed bibliographic database, CAM on PubMed features more than 230,000 references and abstracts for CAM-related articles from scientific journals. This database also provides links to the Web sites of over 1,800 journals, allowing users to view articles in full-text. (A subscription or other fee may be required to access full-text articles.) CAM on PubMed is available through the NCCAM Web site at http://nccam.nih.gov. It can also be accessed at http://www.ncbi.nlm.nih.gov/PubMed by selecting "Limits" and choosing "Complementary Medicine" as a subset.

The NCI Office of Cancer Complementary and Alternative Medicine (OCCAM) coordinates the activities of the NCI in the area of complementary and alternative medicine (CAM). OCCAM supports CAM cancer research and provides information about cancer-related CAM to health providers and the general public.

Web site: http://occam.nci.nih.gov

The **Food and Drug Administration** (FDA) regulates drugs and medical devices to ensure that they are safe and effective.

Food and Drug Administration 5600 Fishers Lane Rockville, MD 20857

Telephone: 1–888–463–6332 (toll free)

Web site: http://www.fda.gov/

The **Federal Trade Commission** (FTC) enforces consumer protection laws. Publications available from the FTC include:

- "Who Cares: Sources of Information About Health Care Products and Services"
- "Fraudulent Health Claims: Don't Be Fooled"

Consumer Response Center Federal Trade Commission CRC-240

Washington, DC 20580

Telephone: 1–877–382–4357 (1–877–FTC–HELP) (toll free) TTY (for deaf and hard of hearing callers): 202–326–2502

Web site: http://www.ftc.gov/

References

Bennet M, Lengacher C. Use of Complementary Therapies in a Rural Cancer Population. Oncology Nursing Forum 1999;26(8):1287–1294.

Cassileth B, Chapman C. Alternative and Complementary Cancer Therapies. *Cancer* 1996; 77(6):1026-1033.

Eisenberg DM, Davis RB, Ettner SL, et al. Trends in Alternative Medicine Use in the United States, 1990–1997. *Journal of the American Medical Association* 2000;280(18):1569–1675.

Jacobs J. Unproven Alternative Methods of Cancer Treatment. In: DeVita, Hellman, Rosenberg, editors. Cancer: Principles and Practice of Oncology. 5th edition. Philadelphia: Lippincott-Raven Publishers; 1997. 2993–3001.

Kao GD, Devine P. Use of Complementary Health Practices by Prostate Carcinoma Patients Undergoing Radiation Therapy. Cancer 2000;88(3):615–619.

Nelson W. Alternative Cancer Treatments. *Highlights in Oncology Practice* 1998;15(4):85–93.

Richardson MA, Sanders T, Palmer JL, Greisinger A, Singletary SE. Complementary/Alternative Medicine Use in a Comprehensive Cancer Center and the Implications for Oncology. *Journal of Clinical Oncology* 2000;18(13):2505–2514.

Sparber A, Bauer L, Curt G, et al. Use of Complementary Medicine by Adult Patients Participating in Cancer Clinical Trials. Oncology Nursing Forum 2000;27(4):623–630.

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Sources of National Cancer Institute Information

Cancer Information Service

Toll-free: 1–800–4–CANCER (1–800–422–6237)

TTY (for deaf and hard of hearing callers): 1–800–332–8615

NCI Online

Internet

Use http://cancer.gov to reach NCI's Web site.

CancerMail Service

To obtain a contents list, send e-mail to cancermail@cips.nci.nih.gov with the word "help" in the body of the message.

CancerFax® fax on demand service

Dial 1–800–624–2511 or 301–402–5874 and follow the voice-prompt instructions.

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